

ENF Environmental Notification Form

For Office Use Only
 Executive Office of Environmental Affairs

EOEA No.: **14192**
 MEPA Analyst: **Nick ZAVOLAS**
 Phone: 617-626-**1030**

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Reconstruction "3R" on Route 140 (Grafton Street)		
Street: Grafton Street		
Municipality: Shrewsbury	Watershed: Blackstone River	
Universal Transverse Mercator Coordinates:	Latitude: 73°06'31.69"W to 73°06'38.27"W Longitude: 36°41'39.65"N to 36°41'18.20"N	
Estimated commencement date: 4/2008	Estimated completion date: 10/2009	
Approximate cost: \$5,650,000.00	Status of project design: 100 %complete	
Proponent: Massachusetts Highway Department & Town of Shrewsbury		
Street: 10 Park Plaza, Room 4260		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Grace Arthur		
Firm/Agency: MassHighway	Street: 10 Park Plaza, Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: 617-973-8251	Fax: 617-973-8879	E-mail: Grace.Arthur@mhd.state.ma.us

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

FHWA 80% MassHighway 20%

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals: Order of Conditions (OOC) issued 4/10/06. NEPA – CE checklist. ACOE – PGP 1 issued 6/21/07.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input checked="" type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	10.93			
New acres of land altered		8.80		
Acres of impervious area	8.91	.50	9.4	
Square feet of new bordering vegetated wetlands alteration		241		
Square feet of new other wetland alteration		597 LUW		
Acres of new non-water dependent use of tidelands or waterways				
STRUCTURES				
Gross square footage	NA			
Number of housing units	NA			
Maximum height (in feet)	NA			
TRANSPORTATION				
Vehicle trips per day	19,000	0	19,000	
Parking spaces	NA			
WATER/WASTEWATER				
Gallons/day (GPD) of water use	NA			
GPD water withdrawal	NA			
GPD wastewater generation/treatment	NA			
Length of water/sewer mains (in miles)	NA			

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

- Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

The Massachusetts Highway Department (MassHighway), in conjunction with the Town of Shrewsbury, is proposing improvements to Grafton Street (Route 140) in Shrewsbury, Massachusetts. The project begins at the intersection with Main Street and extends southerly, a distance of approximately 7,400 feet to the intersection with Route 9. The project also includes Grafton Circle, which extends from Grafton Street, approximately 900 feet south, to Route 9. The purpose of the project is to improve vehicular and pedestrian safety along the Grafton Street project corridor.

EXISTING CONDITIONS

The entire Grafton Street corridor is functionally classified as an urban minor arterial with a posted speed limit of 40 miles per hour. It is an important link in the town-wide roadway system providing a north-south connection between Route 9 and Route 290. Grafton Street is a two-lane roadway with an average daily traffic count of approximately 12,000 vehicles per day (2004). The existing roadway width varies between 26 and 30 feet, widening to 40 feet at the Main Street/Grafton Street intersection. The right-of-way width for the project corridor is 50 feet. The existing pavement is in fair condition with cracking, patches and deterioration evident.

Bituminous concrete sidewalks line both sides of Grafton Street for the majority of the project corridor. However, there are several areas where gaps in the sidewalk force pedestrians to use the roadway shoulder. These gaps include the west side of Grafton Street between Maplewood Road and Lake Street and the east side of Grafton Street between Route 9 and Melody Lane. A grass strip is present on the west side of Grafton Street between Lake Street and Wesleyan Street.

Grafton Street is edged with bituminous concrete berm and granite inlet stones at each of the catch basins located within the project area. The existing bituminous curb is in poor condition as evident by the gaps and deterioration in many areas.

The 4-foot by 3-foot concrete box culvert located approximately 200 feet north of the Woodland Road/Grafton Street intersection is in poor condition. The sidewalls of the culvert exhibit heavy spalling as a result of scour. The bottom 9 inches of both sidewalls has been completely scoured away for a length of approximately 20 feet. There are also several significant transverse cracks near the center of the structure. These cracks have propagated around the entire inside perimeter of the box. The cracking is likely a result of the culvert being under stress from the loss of the sidewall support. Consequently, the roadway is in danger of failure both from a collapse of the culvert and from a washout of the soil around the culvert.

PROPOSED IMPROVEMENTS

This project involves the reconstruction of 8,300± linear feet of existing roadway in Shrewsbury, MA. The project will consist of pavement rehabilitation, traffic signal installation and reconstruction, sidewalk and wheelchair ramp installation, installation and/or resetting of granite curbing, box culvert replacement and minor drainage improvements, and associated signs and pavement markings.

The construction of the project includes roadway widening varying between 3 and 7 feet for the full length of the project, approximately 8300 ft (1.6 miles). Pavement rehabilitation will include in-place pavement reclamation and resurfacing of the entire roadway corridor. The existing horizontal alignment has been altered slightly to fit the proposed 45 foot roadway cross-section within the existing right-of-way to the extent possible.

The vertical alignment will remain virtually unchanged. Minor drainage adjustments will be made as required by changes in the curb line. In some locations the proposed drainage improvements will include deep sump catch basins and water quality hoods that will provide some added water quality treatment benefits at the point of discharge.

The project also includes replacement of the culvert at Big Bummet Brook. The existing culvert will be replaced with a precast concrete box culvert with the same internal dimensions (4'-3" wide x 3'-0" high). The existing headwall at the downstream end of the culvert will be replaced with a new concrete headwall of the same dimensions. The existing headwall at the upstream end of the culvert will be replaced with a new stone masonry headwall on a cast-in-place concrete footing. The existing stone wingwalls at the upstream end of the culvert will be slightly realigned in order to allow water to flow more directly and efficiently into the entrance of the culvert.

TYPICAL CROSS-SECTION

The existing cross-section on Grafton Street varies throughout the project corridor; however, the entire roadway corridor is too narrow to meet the Massachusetts Highway Department's requirements for lane and shoulder widths on an urban arterial. In addition, the existing cross-section does not adequately provide for safe bicycle use on Grafton Street.

The proposed cross-section for Grafton Street was developed considering traffic flow, drainage, safety, and roadside features, as well as the functional classification of the roadway. The proposed cross-section consists of a 12 foot travel lane and a 4.5 foot shoulder in each direction. This results in an overall pavement width of 33 feet. Beyond the curb, a 6 foot cement concrete sidewalk is proposed on both sides of Grafton Street north of the intersection of Grafton Circle and along the west side of Grafton Street south of the intersection. Concrete wheelchair ramps will be constructed and concrete driveway aprons will be reconstructed at all sidewalks. No sidewalks will be constructed on the east side of Grafton Street south of the intersection or along either side of Grafton Circle, although new granite curbs will be installed at the new edge of pavement at those locations. The proposed typical cross-section is graphically depicted in Figure 4-1.

The proposed cross-section provides the 4 foot minimum shoulder width required for adequate bicycle safety. It also provides for improved pedestrian safety with a continuous sidewalk throughout the project corridor that will comply with current ADA/AAB regulations.

The Massachusetts Highway Department's required minimum lane width for an urban arterial is 11 to 12 feet and the required shoulder width is 4 to 12 feet. Considering the limited right-of-way, substantial roadside development, the low rate of accidents, and the potential impacts to abutting properties, a design waiver was requested and approved to allow the proposed 4.5-foot shoulder width described above.

WETLAND IMPACTS AND MITIGATION MEASURES

The project will temporarily impact approximately 241 square feet of Bordering Vegetated Wetlands, 597 square feet of Land Under Water and 38,871 square feet of Riverfront Area. An Order of Conditions was issued by the Shrewsbury Conservation Commission on 04/10/06 allowing work to proceed with Special Conditions.

Erosion and sedimentation controls will be installed prior to construction along the boundaries of wetland resource areas. This will ensure that no sediment is transported into the resource areas prior to or during construction and prior to permanent stabilization of all disturbed surfaces. These barriers will also represent the limit of work. Staked hay bales and polyethylene fabric fencing will be installed.

MEPA THRESHOLD

MEPA review threshold has been exceeded because the construction of this project requires the cutting of five or more living public shade trees of 14 or more inches in diameter at breast height (301 CMR 11.03 (6)(b) 2.b.). A total of 15 living public shade trees are proposed to be removed.

ALTERNATIVES TO PROPOSED PROJECT

The proposed project is a widening and reconstruction of an existing road. Alternatives to the proposed project include the following:

NO ACTION ALTERNATIVE

The overall proposed project to improve the existing roadway (Grafton St.) extends just over one and half miles, north to south. A No Action Alternative to road widening and drainage improvement in this area would be detrimental to the project and public safety in the vicinity for the following reasons:

1. Widening the roadway will allow for the addition of sidewalks, allowing for safer pedestrian travel along the roadway. If the roadway is not widened at the stream crossing area, sidewalks will not be installed, and pedestrian crossing of the bridge will remain hazardous.

No other alternatives have been identified at this time.